Summary Phase IA and Full Phase IB Archaeological Field Reconnaissance Report of Phase 2 of the Martville Mine in the Town of Sterling, Cayuga County, New York

OPRHP #14PR03874

Final report prepared by:

Alliance Archaeological Services



Final report date: April 21st, 2015

Reports of Investigations 15FR01

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Summary Phase IA and Full Phase IB Archaeological Field Reconnaissance Report of Phase 2 of the Martville Mine in the Town of Sterling, Cayuga County, New York

OPRHP #14PR03874

Final report prepared by: Nikki A. Waters, M.A. Principal Investigator

Final report submitted by: Alliance Archaeological Services 4160 Watervale Road Manlius, New York 13104 Office: (315) 329-6587 Mobile: (315) 632-8283

Final report submitted to: C.J. Ferlito Christopher J. Construction 210 Christopher Circle Oswego, NY 13126

April 21st, 2015

Reports of Investigations 15FR01

Management Summary

Involved State and Federal Agencies: Town of Sterling, OPRHP

OPRHP Project Number: 14PR03874

Phase of Survey: Summary Phase IA and full Phase IB

Survey Size: ~3.7 hectares (~9.2 acres)

> Location Information: The project area is located to the immediate east of Sanford Road in the Town of

> > Sterling in the southeast corner of Cayuga County in central New York State. The current work scope was defined as a phase IB archaeological field investigation of the approximately 9.2 acres to be disturbed for Phase 2.

Minor Civil Division: Town of Sterling

County: Cayuga

U.S.G.S. 7.5' Quadrangle Map: 1954 Fair Haven, New York, photo-revised 1976, Copyright 2008 Maptech, Inc.

Archaeological Survey Overview:

Number and interval of shovel tests: 168 at 15 meters (50 foot)

Number and size of units: not applicable Width of plowed strips: not applicable not applicable Surface survey transect interval:

Results of the Archaeological Survey:

Number and name of pre-contact sites identified: 0 0

Number and name of historic sites identified:

Number and name of sites recommended for Phase II/Avoidance: 0

Results of the Architectural Survey:

Number of buildings/structures/cemeteries within the project area: 0 *Number of buildings/structures/cemeteries adjacent the project area*: Number of National Register Listed buildings/structures/cemeteries/districts: Number of National Register Eligible buildings/structures/cemeteries/districts: 0

Recommendations:

Although the cultural background review indicated that the Phase 2 APE had the potential to contain previously unidentified pre-contact and/or historic archaeological sites, no cultural materials or cultural features were identified during the phase IB field investigation. As a result, the Phase 2 APE does not appear to have been the focus of any pre-contact or historic activities which could have left an archaeological trace. No further archaeological investigations within Phase 2 appear warranted at this time and cultural resource clearance for the Phase 2 APE as documented in Figure 10 of this report is recommended.

This recommendation of cultural resource clearance is made with the understanding that if the Phase 2 APE boundaries should change, additional archaeological investigations may be required. As such, this recommendation is only valid for the Phase 2 APE boundaries as documented in this report (Figure 10). This recommendation of cultural resource clearance is also made with the understanding that if any archaeological materials, human remains or associated mortuary goods are uncovered during construction or earth-moving activities within the Phase 2APE, work within the area will immediately cease and the OPRHP will be notified. This recommendation is also made with the understanding that no earth-moving or ground-disturbing activities will take

place within Phase 3 or Phase 4 until archaeological investigations have been

completed within each of these areas.

Report Author and Affiliation: Nikki A. Waters, M.A., Principal Investigator. Alliance Archaeological

Services, 4160 Watervale Road, Manlius, New York 13104.

Report Date: April 21st, 2015

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Introduction

In response to a request from Christopher J. Construction, Alliance Archaeological Services has completed a phase IB archaeological field reconnaissance of Phase 2 of the proposed Martville Gravel Bed in the Town of Sterling, Cayuga County, New York. A phase IA archaeological background and literature review of the overall Martville Gravel Bed was completed in 2014 (Waters 2014).

The purpose of a phase IA archaeological background and literature review is to identify and describe all previously recorded pre-EuroAmerican contact and historic archaeological sites and resources within and around the boundaries of the proposed project area. This information is then combined with a review of the natural setting of the project area in order to develop a regionally specific pre-contact and historic context. This context is then used to evaluate the project area's sensitivity to contain additional pre-contact and/or historic archaeological sites. The results of the phase IA evaluation are then used to evaluate the necessity of any additional archaeological investigations, and if necessary, to formulate a project-specific phase IB archaeological field reconnaissance methodology. The results of both investigations are then used to evaluate the eligibility of any archaeological sites within the project area for nomination to the State and/or National Registers of Historic Places. All aspects of the phase I archaeological survey conducted for this project conform to the New York Archaeological Council's (NYAC) *Standards for Cultural Resource Investigations* (1994) as adopted and required by the New York State Office of Parks, Recreation and Historic Preservation (OPRHP), as well as to the *Phase I Archaeological Report Format Requirements* as published and required by the OPRHP (2005, revised 2013).

The following report details the results of the phase IA background and literature review and phase IB archaeological field reconnaissance, and presents Alliance Archaeological Services' conclusions and recommendations concerning the necessity of any additional archaeological investigations.

Project Description

The overall Martville Gravel Bed project area is approximately 82.1 acres with the total to-be-disturbed area encompassing approximately 36 acres. This 36 acre area has been further subdivided into four phases. Phase 1 consists of approximately 5.5 acres and was surveyed for archaeological resources in 2014 (Waters 2014). Phase 2 consists of approximately 9.2 acres and is the APE evaluated for this report. Phase 3 consists of approximately 8.8 acres and Phase 4 consists of approximately 12.3 acres. The current report covers the phase IB investigation of the approximately 9.2 acres documented in Figure 10 as Phase 2. The phase IB investigations of the remaining two phases will be completed at a later date and detailed in separate reports.

The overall Martville Gravel Bed project area lies to the east of Sanford Road in the southeast corner of Cayuga County. Phase 1 lies within the southwest corner of the overall project area and includes an area of previous excavation. Phase 2 lies to the immediate east, Phase 3 lies to the immediate north of Phase 2, and Phase 4 lies within the remaining northwest project corner (Figure 10). The undisturbed portions of the overall project area surround these four locations in all directions. The current phase IB Area of Potential Effect (APE) is therefore restricted to the ~9.2 acres proposed for Phase 2. The Phase 2 APE is dominated by secondary growth woodland which has been harvested for timber and is predominantly level. It is bordered to the north by Phase 3, to the south and east by the not-to-be-disturbed overall project portions leading to Sterling Creek, and to the west by Phase 1. Phases 1 and 2 are separated by a wooded gully but phases 2 and 3 are contiguous. Representative photographs of the Phase 2 APE were taken at the time of the current field investigation and are provided in Appendix A.

Project Location

The project area is located to the immediate east of Sanford Road in the Town of Sterling in the southeast corner of Cayuga County in central New York State (Figure 1). Figure 2 shows the location of the project area as shown on a portion of the 1954 Fair Haven, New York 7.5' quadrangle, photo-revised 1976, Copyright 2008 Maptech, Inc. Figure 3 shows the project location as shown on a map produced on the Web Soil Survey. Historic maps of the project area are provided as figures 4 through 9. Figure 10 shows the location of the overall project area and all four proposed mining phases. Figure 11 shows the location of all systematic subsurface testing within Phase 2. Figure 12 shows the location and orientation of all project photographs. Photographs (Appendix A) provide representative views of the Phase 2 APE at the time of the current phase IB field investigation.

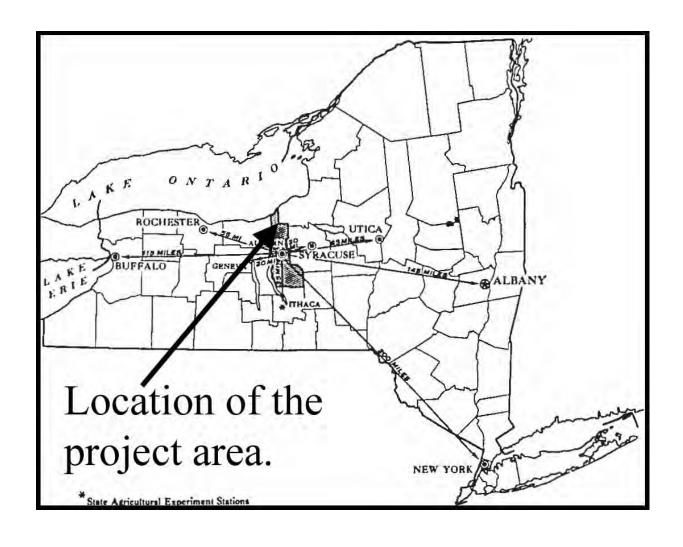


Figure 1. General location of the project area within New York State (Adapted from a base map provided in Hutton 1971).

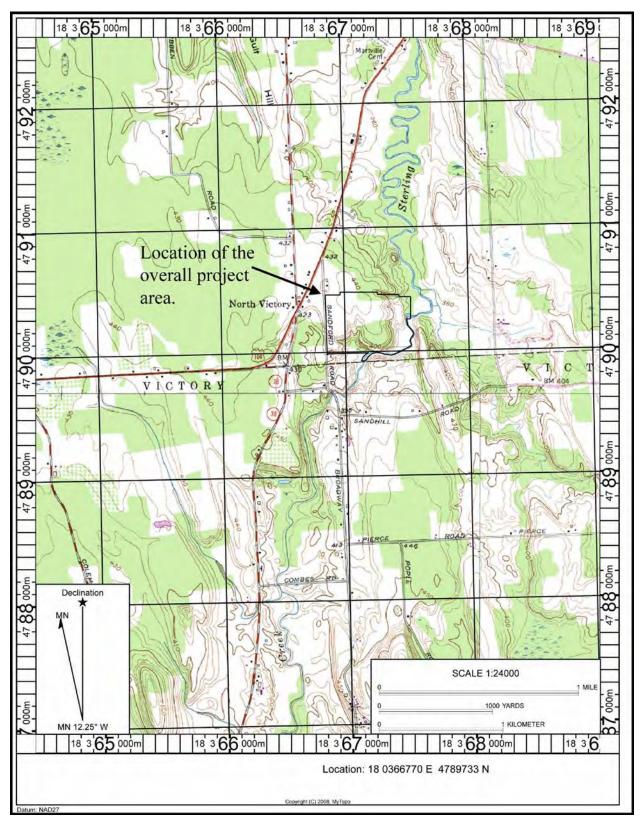


Figure 2. Location of the overall project area as shown on a portion of the 1954 Fair Haven, New York 7.5' quadrangle, photo-revised 1976 Copyright 2008 Maptech, Inc.

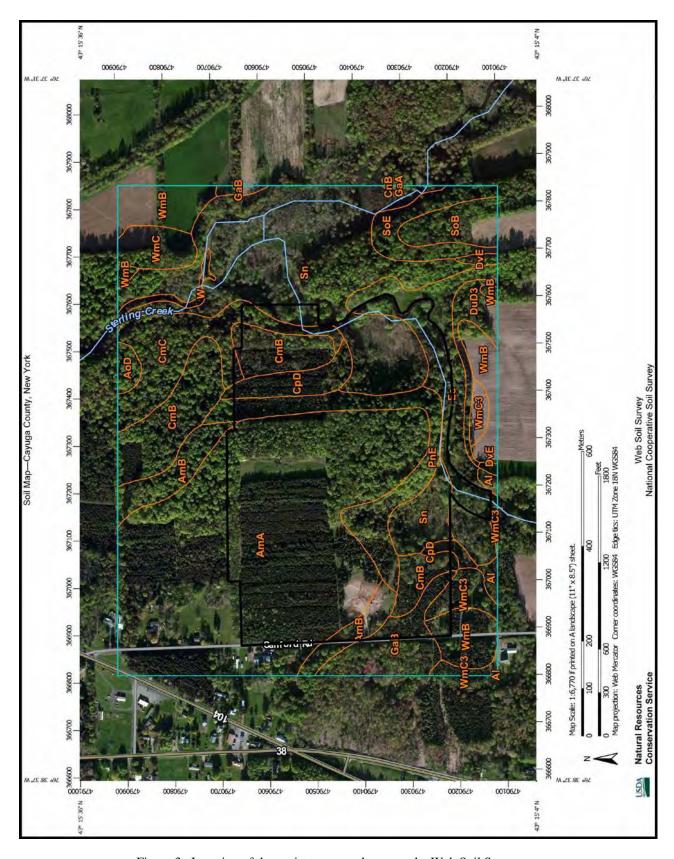


Figure 3. Location of the project area as shown on the Web Soil Survey.

Background Research

Environmental Setting

The following represents a brief synthesis of the available information regarding the physical and environmental setting of the current project area. This information is provided in order to place this area within a context conducive to assessing its potential to contain significant archaeological resources.

Past and Present Land Use and Current Conditions within Phase 1

The Phase 2 APE consists of secondary growth woodland which has been harvested for timber. However, significant disturbance is limited to specific tree removal and with the exception of the excavated tree holes, no widespread removal of the topsoil was identified. Where subsoil spoil piles were identified on the surface, minimal excavation by shovel was able to uncover intact soils underneath. Many undisturbed surfaces which retained the original leaf litter were also identified. Therefore, with the exception of minor variations of less than 1 meter (3 feet) to avoid root balls or timber piles, no variations in the standard shovel test interval were necessary. As a result, no widespread previous significant disturbances were identified and no portions of the Phase 2 APE were eliminated on the basis of previous disturbance.

An evaluation of the available historic maps (figures 4 through 9) and literature indicated that no map-documented structures (MDS) are present within or directly adjacent to the Phase 2 APE. Although a barn or outbuilding related to Whitlock/Yoran residence is within the southwest corner of the overall project area to the south of the Phase 1 APE, no structures associated with this residence were documented for the current APE and no indications of this residence were identified during the previous investigation (Waters 2014). In addition, although two private residences and a sawmill are shown on the 1875 map along the western bank of Sterling Creek to the east of the Phase 2 APE (Figure 6), no indications of these structures were identified within or adjacent to the current APE and no associated archaeological deposits should be impacted. This review also indicated that the current APE was most likely either vacant or agricultural land throughout the historic period. An evaluation of the available historic maps (figures 4 through 9) indicates that Sanford Road has been present since at least 1853. Representative photographs of the Phase 2 APE are provided in Appendix A.

Soils

The overall project area is within the Alton, Arkport, Colonie, Eel, Galen, Howard, Palmyra, Sloan and Williamson series soil associations. Alton Series soils consist of deep, well drained to excessively drained soils which formed in glacial outwash and beach deposits derived mainly from sandstone. Within the southern portion of the county they consist of gravel beach deposits along the edges of post-glacial lakes or as narrow bands along the base of drumlins (Hutton 1971: 111-113). Arkport Series soils consist of deep, moderately coarse textured, well drained to excessively drained soils which formed in sandy deposits. They are found from the north end of Owasco Lake to the Seneca River (Hutton 1971: 115-116). Colonie Series soils consist of deep, well drained to excessively drained soils which formed in sandy deposits lain down by water and/or wind. They are found on glaciofluvial terraces where water-deposited sand has been reworked by wind (Hutton 1971: 125-126). Eel Series soils consist of deep, moderately well drained soils which formed in alluvium derived from glacial drift. They are found on floodplains which are usually flooded annually, most often in spring (Hutton 1971: 129-130). Galen Series soils consist of deep, moderately well drained soils which formed in sandy deposits. They are found on lake plains and sandy deltas (Hutton 1971: 136-137).

Howard Series soils consist of deep, well drained soils which formed in gravelly outwash material consisting predominantly of sandstone and hard shale. They are found in the southeastern portion of the county at elevations above 1,000 feet (Hutton 1971: 141-142). Palmyra Series soils consist of deep, well drained soils that formed in calcareous, glaciofluvial gravel and sand derived from limestone, sandstone and shale. They are common throughout the county, especially along the larger streams at elevations below 1,000 feet (Hutton 1971: 169-171). Sloan Series soils consist of deep, poorly to very poorly drained soils which formed in alluvium derived from glacial drift. They are found within the bottom lands along larger streams and are flooded several times a year (Hutton 1971: 177-178). Williamson Series soils consist of deep, moderately well drained soils with a fragipan which

formed in silt and very fine sand which was deposited by lake water. They are found on lake plains (Hutton 1971: 184-185).

The specific soils within the overall project area are Alton cobbly loam, 0 to 3% slopes (AmA); Alton cobbly loam, 3 to 8% slopes (AmB); Colonie loamy fine sand, 1 to 6% slopes (CmB); Colonie loamy fine sand, 6 to 12% slopes (CmC); Colonie and Arkport soils, 12 to 22% slopes (CpD); Eel silt loam (Ee); Galen fine sandy loam, 2 to 6% slopes (GaB); Palmyra, Howard and Alton soils, 25 to 40% slopes (PnE); Sloan silt loam (Sn); Williamson silt loam, 2 to 6% slopes (WmB); and Williamson silt loam, 6 to 12% slopes (WmC3) (Web Soil Survey; Hutton 1971:111-113, 115-116, 125-126, 129-130, 136-137, 141-142, 169-171, 177-178, and 184-185; Figure 3).

The specific soils within the Phase 2 APE are almost exclusively Alton cobbly loam, 0 to 3% slopes (AmA). However, the sloped edges along the border of the Phase 2 APE to the west, south and east are within Howard and Alton soils, 25 to 40% slopes (PnE). The key properties of both Phase 2 soils are illustrated in Table 1 below. For a complete discussion of the soils within the overall project area please refer to the original phase IA report (Waters 2014).

Table 1:									
Soils Within the Phase 2 APE									
Name	Soil Horizon Depth (cm/in)	Color	Texture,	Slope	Drainage	Landform			
			Inclusions						
Alton	A _p : 0-18 cm (0-7 in)	DkBrn	GrvSaLo	0-3	WD-ED	On terraces.			
cobbly	B21: 18-41 cm (7-16 in)	RdBrn	GrvSaLo						
loam,	B22: 41-71 cm (16-28 in)	RdBrn	GrvSaLo						
(AmA)	IIB23: 71-104 cm (28-41 in)	Brn	VGrvSaLo						
	IIB3: 104-160 cm (41-63 in)	Brn	VGrvSaLo						
	IIIC :160-305 cm (63-120 in)	DkBrn	StrSaGrvSaGrv						
Comments: th	is soil has a profile described a	s representati	ve of the series. H	owever, th	e surface laye	er is loam and			
has a high cor	ntent of cobblestones.								
Palmyra,	A11: 0-13 cm (0-5 in)	DkGr	GrvLo	25-40	WD-ED	On old gravel			
Howard and	A12: 13-25 cm (5-10 in)	DkGrBrn	GrvLo			bars and			
Alton soils,	A21 : 25-30 cm (10-12 in)	YBrn	GrvLo			beaches of			
(PnE)	A22 : 30-43 cm (12-17 in)	LtYBrn	GrvLo			post glacial			
	AB: 43-74 cm (17-29 in)	LtYBrn	GrvLo			lakes.			
	IIB21 _t :74-104 (29-41in)	BrnYBrn	VGrvLo						
	IIB22 _t : 104-137 (41-54 in)	DkYBrn	VGrvFLo						
	IIB3C1 :137-157(54-62 in)	YBrn	VGrvLo						
	IIIC2:157-305 (62-120in)	WtDkGr	StrSaGrv						
Comments: ea	ach of these soils has a profile d	escribed as re	epresentative of the	eir respecti	ve series. Ho	wever, there is			
	tratified gravel and sand and a					ion is for the			
Howard soils.	The Palmyra soils are describe	ed below and	the Alton soils are	described	above.				
Palmyra,	A_p : 0-20 cm (0-8 in)	VDkBrn	GrvLo	25-40	WD-ED	On old gravel			
Howard and	A2: 20-28 cm (8-11 in)	Brn	GrvLo			bars and			
Alton soils,	BA: 28-36 cm (11-14 in)	DkBrn	GrvLo			beaches of			
(PnE)	B21 _t : 36-81 cm (14-32 in)	DkBrn	GrvLo			post glacial			
	B22 _t : 81-86 cm (32-34 in)	DkBrn	VGrvHLo			lakes.			
	IIC: 86-152 cm (34-60 in)	BlkLtGr	StrGrvSa						
Comments: ea	ach of these soils has a profile d	escribed as re	epresentative of the	eir respecti	ve series. Ho	wever, there is			
less depth to stratified gravel and sand and a thinner subsoil with a lower clay content. This description is for the									

Palmyra soils. The Howard and Alton soils are described above.

COLOR/TEXTURE KEY:

Blk-Black Dk-Dark F-Fine Brn-Brown cm-centimeters Gr-Grayish **Grv-Gravelly** H-Heavy Lo-Loam Lt-Light Rd-Reddish Str-Stratified V-Very Y-Yellowish Sa-Sandy

DRAINAGE KEY:

ED-Excessively Drained WD-Well Drained The Phase 2 APE is almost entirely within well drained to excessively drained soils which formed in glacial outwash and beach deposits. These soils are deep and predominantly level and erosion is rarely a hazard. Although poorly drained and better drained alluvial soils are present within the floodplain of Sterling Creek to the east and south of Phase 2, no portions of the floodplain will be disturbed by the proposed project. As a result, the current project should not impact any deeply buried archaeological materials. As a result, cultural materials, if present, are expected to be restricted to the upper and central portions of the soil profile: i.e. less than 30 cm (12 inches) below the ground surface. A comparison of the results of the phase IB soil evaluation with the published soil information is provided in the *Results* section.

Drainage

The project area is drained by Sterling Creek which borders the overall project area to the south and east. The nearest portion of the Phase 2 APE is approximately 91 meters (300 feet) from the creek. The nearest wetlands are shown approximately 1,219 meters (4,000 feet) to the east along both sides of the county border. Additional wetlands are shown further to the south (Figure 2). Although no wetlands are shown either within or adjacent the Phase 2 APE, poorly and very poorly drained soils are mapped to the south and southwest within the overall project boundaries (Figure 3). The phase IB fieldwork was completed in late spring and no widespread areas of saturated soils, ponding or permanent standing water were identified. As a result, no portions of the Phase 2 APE were eliminated from the subsurface investigation on the basis of drainage.

Site File Search

Evaluated site files included the currently available New York State Museum (NYSM) site file records, the currently available OPRHP site file records and the currently available OPRHP previous archaeological survey report files. Available National Register of Historic Places Building Inventories were also evaluated to identify both National Register Listed (NRL) and National Register Eligible (NRE) structures within or adjacent to the current project area. Historic map evaluation included the 1853 Geil *Map of Cayuga County*, the 1859 Dawson *Map of Cayuga County*, the 1875 Beers *Atlas of Cayuga County*, the 1904 *New Century Atlas of Cayuga County*, and the 1900 and 1960 15 minute Oswego, New York quadrangles. The file search also included an evaluation of any pre-EuroAmerican contact sites documented by early investigators of the region, such as Beauchamp (1900) and Parker (1922), as well as an evaluation of the Town of Sterling and Cayuga County histories for information relevant to the current project. These data were then combined with the results of the natural and environmental setting review in order to construct a regionally specific archaeological sensitivity assessment for the current project area. The results of this file search are presented below.

Previously Recorded Archaeological Sites

A review of the currently available NYSM and OPRHP site files indicated that although no pre-contact or historic archaeological sites have yet been recorded either within or adjacent to the current project area, one pre and/or early European contact archaeological site has already been recorded within approximately one mile. However, no EuroAmerican historic archaeological sites have yet been recorded within the same interval. This pre-recorded site is summarized in Table 2 and discussed in more detail below.

Table 2: Pre-recorded Archaeological Sites Reported Within/Near the Overall Project Area								
NYS OPRHP Site #	Additional Site #s and/or Names	Dist./Direction (meters/feet)*	Time Period	Site Type				
	ACP CYGA No#;	254 meters;	indeterminate	traces of occupation				
	NYSM Site #5372	833feet; SE	pre or early contact					

^{*}Minimum distance provided.

ACP = Arthur C. Parker

NYSM Site #5372

NYSM Site #5372 is shown on the state records approximately 254 meters (833 feet) to the southeast of the overall project area along the banks of an unnamed tributary of Sterling Creek. This site continues southeast beyond the one mile evaluation interval. Although this site was first recorded by Parker as traces of pre-contact occupation,

no specific county site number was assigned and no textural description was provided (Parker 1922: 500-506). No further information or indications of any subsequent archaeological investigations are provided on the NYSM site form. Parker recorded numerous similar trace areas throughout New York State and used them to represent zones where widely scattered cultural remains could often be found. These trace areas had very wide, amorphous boundaries and were used to categorize a region where several smaller, more discrete sites were likely to be located. Since no indications of further archaeological investigations were identified, the exact nature and extent of the archaeological materials within this trace area are unknown. However, as the overall project area and Phase 2 APE are well removed from the reported location of this site, the probability for any associated archaeological materials to be within the Phase 2 APE is very low. As a result, no further archaeological investigations related to the current project were conducted.

Previous Professional Archaeological Investigations

A review of the available survey files indicated that with the exception of the phase I survey conducted by Alliance Archaeological Services (Waters 2014), the current project area has never been the subject of professional archaeological field investigations and no additional professional archaeological investigations have yet taken place within approximately one mile. The previous investigation of the Phase 1 APE failed to produce any indications of past cultural use (Waters 2014).

Pre-contact Sensitivity Assessment

The review of archaeological sites within approximately one mile of the overall project area did not show any known pre-contact resources within or directly adjacent to this area. However, Parker does show traces of pre-contact occupation along an unnamed tributary of Sterling Creek to the southeast within and extending southeast beyond the one mile evaluation interval. This suggests that some form of small scale habitation or resource extraction and processing was taking place within this area. Although the procurement of floral and faunal resources does not always produce a visible archaeological trace, there remains a potential for activities which transcended this threshold to have taken place within the current project boundaries. Given the focus of these site boundaries along both sides of the creek, these extraction activities could also have focused on aquatic resources. Although the overall project area is removed from the reported location of this site, it is in the general proximity. The overall project area also contains portions of Sterling Creek. As a result, the overall project area was considered to have a low to moderate potential to contain previously unidentified pre-contact archaeological sites.

National Register Listed and Eligible Properties

A review of the available *National Register of Historic Places Building Inventories* did not indicate any National Register Listed resources within one mile. In addition, no National Register Eligible resources and no structures included on the *Building and Structures Inventory List* are present within approximately 76 meters (250 feet). As a result, no further investigations related to the current project were conducted.

Map-documented Historic Structures

The review of available historic maps (figures 4 through 9) indicated that although no map-documented structures (MDS) are within the four areas of proposed project impacts, five MDS are shown within the overall project boundaries from 1875 to 1904 (figures 6 through 8). However, the historic maps from 1853 through 1859 (figures 4 and 5) do not show any MDS within the overall project boundaries or the four proposed APEs. Four of these MDS are related and consist of a road, two private residences belong to H. Adle, and a sawmill. Although the scale of the 1875 map seems to indicate that these latter three structures are adjacent the overall project boundaries to the east, the eastern overall project boundary within this area is Sterling Creek. As this map clearly shows these MDS along the west bank of the creek, these MDS are within the current overall project boundaries. The road is shown extending eastward from Sanford Road along the northern border of the overall project area and is denoted in 1875 (Figure 6) as an established roadway. Although the 1900 topographic map (Figure 7) does not show any of these MDS as still extant, the 1904 map (Figure 8) does show the road as dashed lines, indicating that it was still present but no longer maintained. Neither the H. Adle residences nor the sawmill are shown as of 1904 (Figure 8). The subsequent historic map (Figure 9) also fails to show any MDS within or adjacent to this area. As a result, the sawmill and private residences appear to have been built sometime after 1859 and abandoned by 1900.

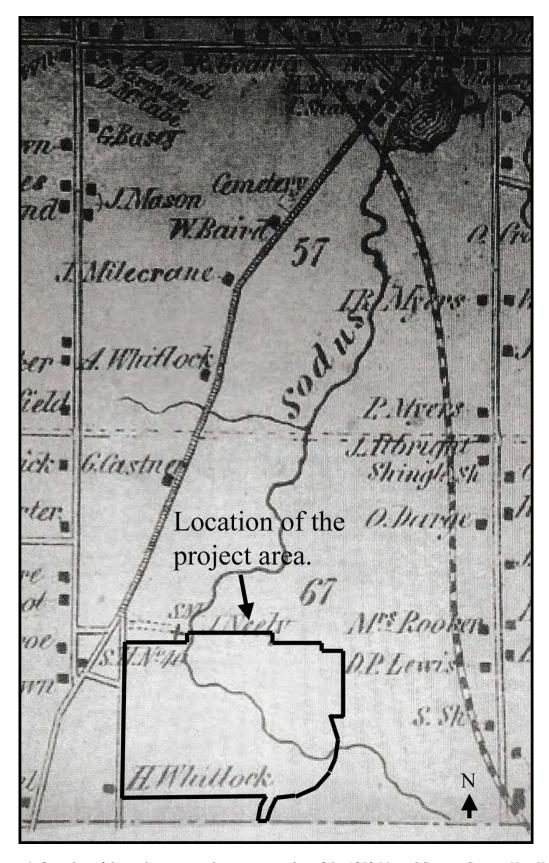


Figure 4. Location of the project area as shown on a portion of the 1853 Map of Cayuga County, New York.

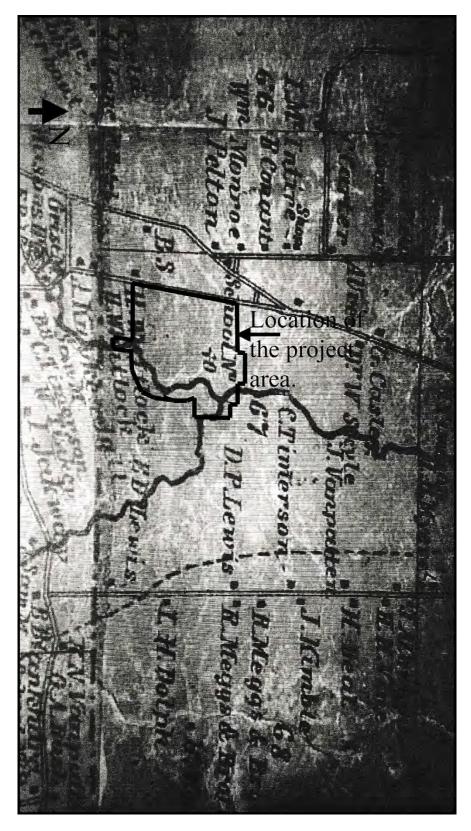


Figure 5. Location of the project area as shown on a portion of the 1859 Map of Cayuga County, New York.

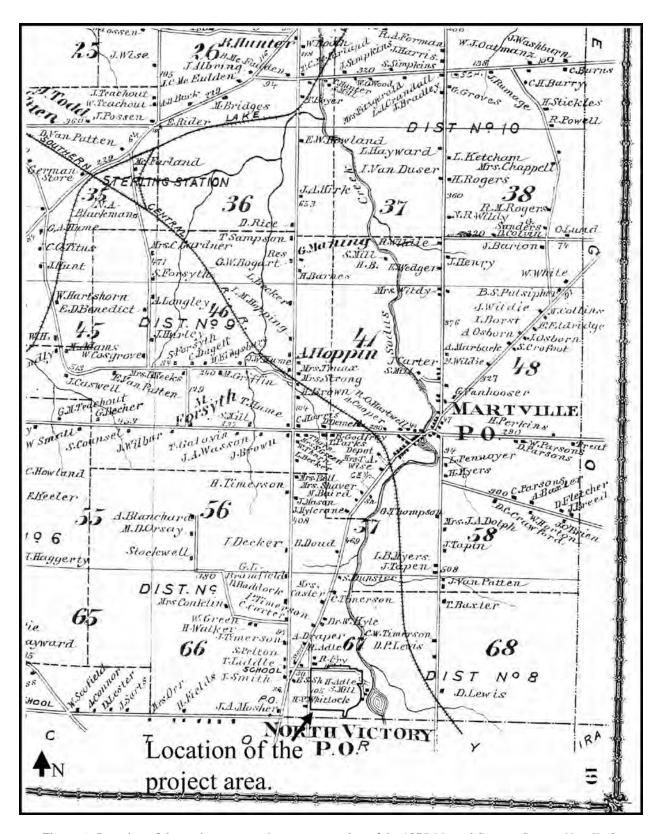


Figure 6. Location of the project area as shown on a portion of the 1875 Map of Cayuga County, New York.

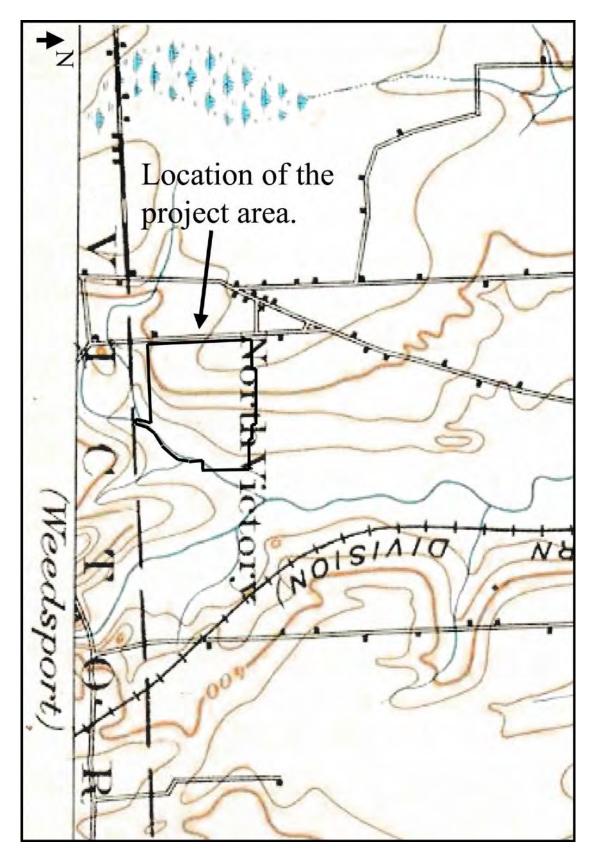


Figure 7. Location of the project area as shown on a portion of the 1900 Oswego, New York 15' quadrangle.

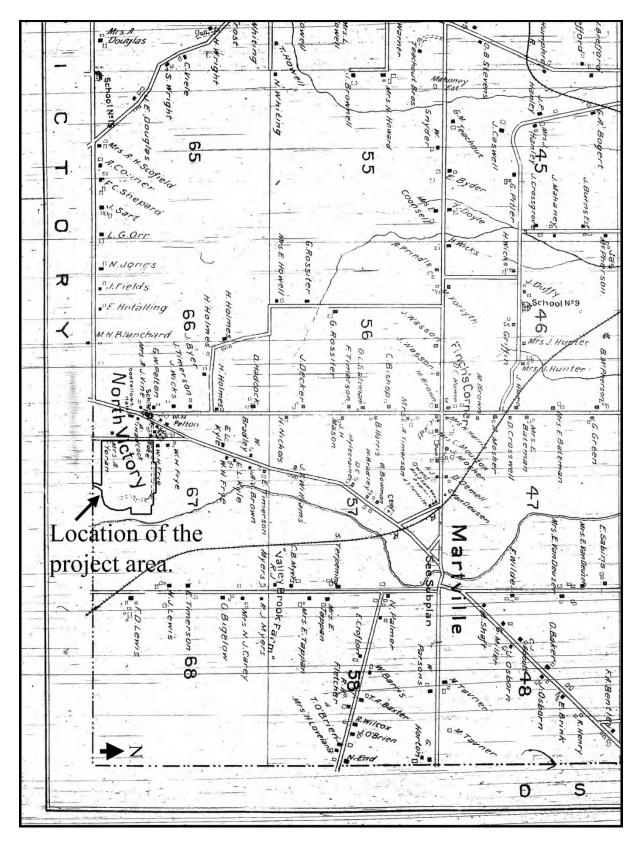


Figure 8. Location of the project area as shown on a portion of the 1904 Map of Cayuga County, New York.

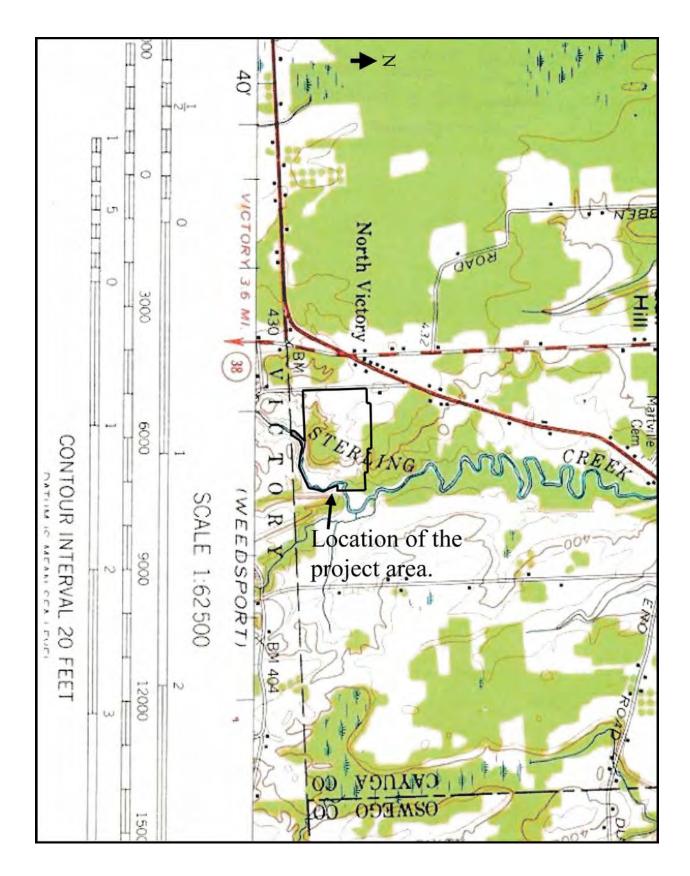


Figure 9. Location of the project area as shown on a portion of the 1960 Oswego, New York 15' quadrangle.

The only remaining MDS within the overall project boundaries is an outbuilding owned by Mrs. A Yoran which is only shown as extant on the 1904 map. This structure most likely represents a barn related to the residence directly opposite on the west side of Sanford Road. This MDS is therefore located within the far southwest corner of the overall project area to the southwest of the Phase 1 APE. The house associated with this residence is first shown as extant on the 1853 map (Figure 4) and is identified as the H. Whitlock residence. A MDS belong to H. Whitlock is still shown at this location in 1859 and 1875 (figures 5 and 6). The 1900 topographic map (Figure 7) only shows the Whitlock/Yoran residence along the west side of Sanford Road. By 1960 (Figure 9) this residence is no longer shown as extant. The modern topographic map only shows the barn (Figure 2). This map was originally published in 1954 and was photo-revised in 1976 which indicates that although the house was gone by the early 1950s, the barn was still standing as of 1976. However, by the time of the Phase 1 APE investigation this structure had been demolished.

Although no additional MDS are shown within the overall project boundaries on any of the available historic maps, a sawmill is shown to the north in 1853 (Figure 4). However, this structure is gone by 1859 (Figure 5). In 1875 (Figure 6) the R. Fry residence is shown to the north along the east side of Sanford Road. By 1900 (Figure 7) a private residence is still shown at this location and in 1904 (Figure 8) this residence is identified as belonging to W.H. Frye. A private residence is still shown at the location in 1960 (Figure 9) and on the modern topographic map (Figure 2). A private residence was still at this location during the original evaluation.

The next closest MDS are residences shown along Sanford Road, Route 104 and the other roadways further to the west. However, as all of these MDS are well removed from the overall project area no related archaeological deposits will be impacted by the current project. Although no public or commercial MDS are within or adjacent to the overall project area, commercial and public MDS within the overall area include two schoolhouses, a sawmill, two blacksmith shops, a grist mill, a store, and the Odd Fellows Hall. This review therefore indicated that the specific project area appears to have been predominantly residential and agricultural land throughout the 19th and early 20th centuries. However, the southeastern portion of the overall project area also hosted a sawmill during the latter half of the 19th century. Although these structures are to the east of the Phase 2 APE, they are within the not-to-be-disturbed floodplain. The historic map review also indicated that Sanford Road has been present since at least 1853 (figures 4 through 9).

Historic Sensitivity Assessment

A review of the available historic literature indicated that the area was first settled by EuroAmericans shortly after the Revolutionary War. The town itself is named after Lord William Alexander Sterling who served during the war. The Town of Sterling was separated from the Town of Cato on June 19th, 1812. Although agriculture was an important early industry, grist and saw mills, along with taverns, stores, doctors, schools and churches were also soon established (Storke 1879: 252-263).

Although no mention of the specific project area is made, the historic maps (figures 4 through 9) do show five MDS within the overall project boundaries. However, none of these resources are either within or adjacent to the four areas of proposed project impacts. Four of these MDS consist of one road, two private residences belong to H. Adle, and a sawmill. The private residences and the sawmill are shown at the end of the road within the southeast overall project corner to the east of the Phase 2 APE. The road extended eastward from Sanford Road along the northern border of the overall project area and ended near Sterling Creek. The sawmill and private residences appear to have been built sometime after 1859 and abandoned by 1900. The 1904 map (Figure 8) shows the road as dashed lines, indicating that it was still present but no longer maintained. Although a dirt road is present at this location today it is no longer listed as a road on the modern maps.

The fifth MDS within the overall project boundaries is an outbuilding (most likely a barn) owned by Mrs. A Yoran on the 1904 map and is most likely related to the residence directly opposite on the west side of Sanford Road. This MDS is therefore located within the far southwest corner of the overall project area to the southwest of the current Phase 1 APE. The house associated with this residence is shown as extant from 1853 (Figure 4) until sometime between 1904 and 1954 (figures 8 and 2). The modern topographic map only shows the barn (Figure 2), indicating that this MDS was still standing as of 1976. However, by the time of the current investigation this structure had been demolished.

Although no MDS are shown either within or adjacent to any of the four proposed APEs, five MDS have been documented within the overall project boundaries. Two private residences and a sawmill within the southeastern overall project corner are shown at the end of a road which ran along the northern project border and the final MDS is an outbuilding/barn related to a private residence along the opposite side of Sanford Road. As a result, it is highly likely that archaeological deposits related to the occupation and use of these MDS are still present within these immediate areas. However, none of the four APEs are within or directly adjacent to these areas. Therefore, although the historic sensitivity of these specific areas is considered to be high, the potential for 19th to 20th century archaeological deposits to be present within the four proposed APEs is considered to be low to moderate.

Archaeological Survey Methodology

All aspects of the phase IB field evaluation of the proposed Martville Gravel Bed Phase 2 project site were conducted by and under the direct supervision of Nikki A. Waters, M.A., Principal Investigator. Field crew consisted of Reda A. Korkor. Fieldwork was completed on April 12th, 13th, 14th and 15th, 2015. Project photography was conducted during fieldwork. Conditions at the time of the phase IB field investigation were warm and clear with highs in the low to mid-60s. As a result, no fieldtime was lost due to adverse weather or field conditions.

All aspects of this evaluation were conducted in accordance with the New York Archaeological Council's *Standards for Cultural Resource Investigations* (1994) as adopted and required by the New York State Office of Parks, Recreation and Historic Preservation (OPRHP), as well as to *the Phase I Archaeological Report Format Requirements* as published and required by the OPRHP (2005; revised 2013). The specific field methodology employed is discussed in more detail below.

Surface Inspection

A non-systematic pedestrian survey was first conducted in order to gather data relevant to 1) assessing the nature and extent of any previous disturbance, 2) gather data relevant to formulating an effective systematic subsurface testing strategy, and 3) identify any obvious surface indications of pre-contact and/or historic archaeological materials and/or features. This non-systematic survey was conducted by walking the perimeter of the Phase 2 APE, as well as several transects which cut across and through it. Optimal locations for shovel test transects, based upon their potential to provide the widest possible sample set, were also selected. All final shovel test locations were recorded on the project map (Figure 11).

If cultural materials had been identified, a pin flag would have been placed at each findspot until the full distribution of the surface scatter could be identified. All artifact findspots would then have been recorded on the project map and the materials bagged by pin flag and GPS coordinates. Radial shovel tests would then have been excavated in the area surrounding each positive findspot in order to further evaluate the soil stratigraphy and assess the potential for additional and/or buried cultural materials and/or features to be present. The specific shovel test methodology is described in detail below.

Subsurface Inspection

Given that the available ground surface visibility throughout the Phase 2 APE was less than 5%, no surface indications of pre-contact and/or historic archaeological sites were identified during the non-systematic surface inspection, no pre-recorded archaeological sites were documented as within or adjacent to this area, and no MDS were shown to be within or adjacent to this area, only a standard, subsurface investigation was conducted (Appendix B). This investigation involved the hand excavation of shovel tests at no greater than 15 meter (50 foot) intervals. All shovel tests were a minimum of 30 cm (12 inches) in diameter, excavated a minimum of one cubic foot of soil, and were continued into undisturbed or non-artifact bearing subsoil. All excavated soils were then screened through 6mm (1/4 inch) mesh hardware cloth. The exposed soil profile was then visually examined to aid in the identification of cultural features, deposits and/or buried cultural horizons.

If cultural materials had been identified, the recovered artifacts would have been bagged by shovel test location and relative depth below surface, if applicable. Radial shovel tests would then have been excavated in each of the cardinal and subcardinal directions at 3 and 7.5 meter (10 and 25 foot) intervals, respectively. If indications

of cultural features had been noted, the relevant portion of the shovel test would have been profiled, the exposed feature described and documented, and then covered with plastic prior to backfilling. Additional radial shovel tests, as described above, would then have been excavated. All positive shovel test locations would then have been photographed and their location recorded on the project map (Figure 11). A detailed soil profile, including Munsell color and soil texture analyses, was obtained for each excavated probe. Upon completion of each investigation, all shovel tests were backfilled and their location recorded on the project map (Figure 11).

Additional Excavation

No areas of colluvial, eolian or deep historic fill deposits were identified within or adjacent to the four proposed APEs during the course of the phase I investigations. As a result, no deep subsurface testing was conducted. Although suitably drained alluvial soils are present within the floodplain of Sterling Creek, no portions of the floodplain will be disturbed by the proposed project. As a result, the current project should not impact any deeply buried archaeological materials and no deep subsurface testing is recommended at this time. However, if determined necessary, these investigations should be designed in consultation with the OPRHP.

Archaeological Phase IB Survey Results

Summary of the Background and Literature Review

The background and literature review indicated that no archaeological sites have yet been recorded within or directly adjacent to any of the four proposed APEs and only one pre-contact archaeological site has yet been recorded within one mile. This site consists of traces of pre-contact occupation along an unnamed tributary of Sterling Creek to the southeast of the overall project area, within and extending southeast beyond the one mile evaluation interval. This site therefore suggests that some form of small scale habitation or resource extraction and processing was taking place. Although the procurement of floral and faunal resources does not always produce a visible archaeological trace, there remains a potential for activities which transcended this threshold to have taken place within the overall project boundaries. Given the focus of these site boundaries along both sides of the creek, these extraction activities could also have focused on aquatic resources. Although the overall project area is removed from the reported location of this site, it is in the general proximity. The overall project area also contains portions of Sterling Creek. As a result, the overall project area was considered to have a low to moderate potential to contain previously unidentified pre-contact archaeological sites.

The background and literature review also indicated that although no MDS are shown either within or adjacent to any of the four proposed APEs, five MDS have been documented within the overall project boundaries. Two private residences and a sawmill within the southeastern overall project corner are shown at the end of a road which ran along the northern project border and the final MDS is an outbuilding/barn related to a private residence along the opposite side of Sanford Road. As a result, it is highly likely that archaeological deposits related to the occupation and use of these MDS are still present within these immediate areas. However, none of the four APEs are within or directly adjacent to these areas. Therefore, although the historic sensitivity of these specific areas is considered to be high, the potential for 19th to 20th century archaeological deposits to be present within the four proposed APEs is considered to be low to moderate.

Summary of the Surface Inspection

The non-systematic pedestrian survey confirmed that the Phase 2 APE consists of approximately 3.7 hectares (9.2 acres) of land in harvested secondary growth woodland. This area is predominantly level but slopes downward to Sterling Creek to the south and east. It is separated from Phase 1 to the west by a wooded gully and is bordered to the north by an open grass field and standing woodland (Phase 3). Portions of a fieldstone wall also lie along this northern wooded border. Additional woodland lies to the east and south within the floodplain of Sterling Creek. However, no portions of this floodplain will be disturbed by the proposed project. Although Phase 2 had been harvested for timber, ground disturbances were found to be restricted to areas of specific tree removal. Intact ground surfaces with the original leaf cover were noted throughout the Phase 2 APE and were soil spoil piles were identified, they were found to be easily removed by shovel with intact soils underneath. As a result, no widespread areas of previous significant disturbance were noted and no areas were eliminated from the subsequent subsurface investigation.



Figure 10. Location of the overall project area and all four APEs (Adapted from a base map provided by Thomas Giles, Geologist).

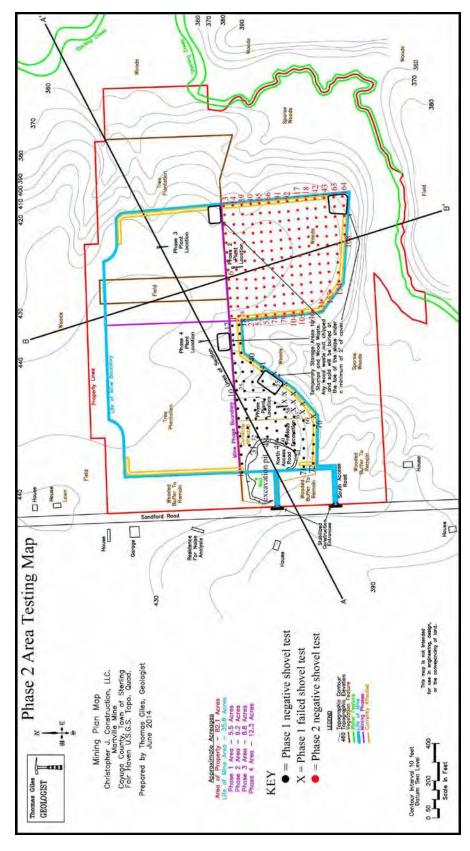


Figure 11. Location of all subsurface testing (Adapted from a base map provided by Thomas Giles, Geologist).

The surface survey did not result in the identification of any historic cultural materials or features which could be related to the two private residences and the sawmill shown on the 1875 map along the western bank of Sterling Creek (Figure 6). However, as these MDS are well within the not-to-be-disturbed floodplain, no direct archaeological investigations of these structures was conducted. In addition, although the exposed root balls were visually evaluated for cultural materials or indications of cultural features, none were identified.

Summary of the Subsurface Investigations

A total of 168 standard interval (15 meter/50feet) (Figure 11) shovel tests were excavated across the Phase 2 APE in order to obtain data relevant to adequately assessing the past cultural use of this area, further assess the nature and extent of the previous timbering disturbance, and provide relevant information on the local stratigraphy and drainage. Shovel tests were excavated across all portions of Phase 2 with only minor variations (less than 1 meter) to avoid timber piles or root balls. These data were necessary in order to further assess the potential for the Phase 2 APE to contain previously unidentified archaeological resources. No positive shovel tests were identified so no radial shovel tests were excavated. All excavated soils were consistent with the mapped profiles of the region (Web Soil Survey; Hutton 1971:111-113, 115-116, 125-126, 129-130, 136-137, 141-142, 169-171, 177-178, and 184-185; Figure 3). All shovel test results are provided in Appendix B.

A typical profile consisted of a highly uniform dark brown, sandy loam A-horizon. The average depth was 15 cm (6 inches) below the current surface. The B-horizon soils consisted of a brown to dark yellowish brown to strong brown, sandy loam. Depth of excavation within the subsoil ranged from 18 to 41 cm (7 to 16 inches) below the current surface. All excavated soils therefore revealed profiles consistent with the mapped soils of the region and no further subsurface investigations were conducted.

Conclusions and Recommendations

In response to a request from Christopher J. Construction, Alliance Archaeological Services has completed a phase IB archaeological field reconnaissance of the Phase 2 portion of the proposed Martville Gravel Bed in the Town of Sterling, Cayuga County, New York.

Although the cultural background review indicated that the Phase 2 APE had the potential to contain previously unidentified pre-contact and/or historic archaeological sites, no cultural materials or cultural features were identified during the phase IB field investigation. As a result, the Phase 2 APE does not appear to have been the focus of any pre-contact or historic activities which could have left an archaeological trace. No further archaeological investigations within Phase 2 appear warranted at this time and cultural resource clearance for the Phase 2 APE as documented in Figure 10 of this report is recommended.

This recommendation of cultural resource clearance is made with the understanding that if the Phase 2 APE boundaries should change, additional archaeological investigations may be required. As such, this recommendation is only valid for the Phase 2 APE boundaries as documented in this report (Figure 10). This recommendation of cultural resource clearance is also made with the understanding that if any archaeological materials, human remains or associated mortuary goods are uncovered during construction or earth-moving activities within the Phase 2APE, work within the area will immediately cease and the OPRHP will be notified. This recommendation is also made with the understanding that no earth-moving or ground-disturbing activities will take place within Phase 3 or Phase 4 until archaeological investigations have been completed within each of these areas.

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Appendix A: Photographs of the Project Area

LIST OF PHOTOGRAPHS

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hotograph 6. Looking north along the eastern border of Phase 2.	3
hotograph 7. Looking northeast from the eastern border of Phase 2	4
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hotograph 9. Looking west from the southwestern border of Phase 2	5
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hotograph 21. Looking east along the northern border of Phase 2	
hotograph 22. Looking east along the northern border of Phase 2	
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Figure 12. Location and orientation of all Phase 2 photographs (Adapted from a base map provided by Thomas Giles, Geologist).



Photograph 1. Looking south along the eastern border of Phase 2.



Photograph 2. Looking southwest from the eastern border of Phase 2.



Photograph 3. Looking southwest from the eastern border of Phase 2.



Photograph 4. Looking west from the eastern border of Phase 2.



Photograph 5. Looking northwest from the eastern border of Phase 2.



Photograph 6. Looking north along the eastern border of Phase 2.



Photograph 7. Looking northeast from the eastern border of Phase 2.



Photograph 8. Looking southeast from the eastern border of Phase 2.



Photograph 9. Looking west from the southwestern border of Phase 2.



Photograph 10. Looking north from the southwestern border of Phase 2.



Photograph 11. Looking northeast from the southwestern border of Phase 2.



Photograph 12. Looking east from the southwestern border of Phase 2.



Photograph 13. Looking southeast from the southwestern border of Phase 2.



Photograph 14. Looking southeast from the southwestern border of Phase 2.



Photograph 15. Looking south from the southwestern border of Phase 2.



Photograph 16. Looking north from the northwestern border of Phase 2.



Photograph 17. Looking northeast from the northwestern border of Phase 2.



Photograph 18. Looking east from the northwestern border of Phase 2.



Photograph 19. Looking southeast from the northwestern border of Phase 2.



Photograph 20. Looking south from the northwestern border of Phase 2.



Photograph 21. Looking east along the northern border of Phase 2.



Photograph 22. Looking east along the northern border of Phase 2.



Photograph 23. Looking southeast from the northeastern border of Phase 2.



Photograph 24. Looking south from the northeastern border of Phase 2.



Photograph 25. Looking southwest from the northeastern border of Phase 2.



Photograph 26. Looking west along the northern border of Phase 2.

Appendix B: Shovel Test Pit Summary and Soil Profile Analysis

Date	04/12/2015		04/12/2015		04/12/2015		04/12/2015		04/12/2015		04/12/2015		04/12/2015		04/12/2015		04/12/2015		04/12/2015		04/12/2015		04/12/2015		04/12/2015		04/12/2015		04/12/2015		04/12/2015		04/12/2015
Excavator(s)	NAW/RAK		NAW		RAK		NAW		RAK		NAW		RAK		NAW		RAK		NAW		RAK		NAW		RAK		NAW		RAK		NAW		RAK
Artifact Summary	-	-	1	-	-					-	-	-				-	-	-	1	-			-	-		-	-			-	-	-	:
Soil Texture	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo
Soil Color	DkBrn (10 YR 3/3)	StrBrn (7.5 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	Brn (10 YR 4/3)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/4)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/4)	DkBrn (10 YR 3/3)	Brn (10 YR 4/3)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/4)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/4)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/4)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)
Depth (cm)	0-13	13-27	0-18	18-33	0-22	22-40	0-20	20-25	0-14	14-26	0-15	15-30	0-15	15-31	0-12	12-28	0-14	14-30	0-21	21-38	0-17	17-32	0-14	14-35	6-0	9-32	0-20	20-36	0-18	18-34	0-17	17-37	0-15
STP#	1		2		3		4		5		9		7		∞		6		10		111		12		13		14		15		16		17

Date		04/12/2015		04/12/2015		04/12/2015		04/12/2015		04/12/2015		04/12/2015		04/12/2015		04/12/2015		04/12/2015		04/12/2015		04/12/2015		04/12/2015		04/12/2015		04/12/2015		04/12/2015		04/12/2015	
Excavator(s)		NAW		RAK		NAW		NAW/RAK		NAW		RAK		NAW		RAK		NAW		RAK													
Artifact Summary	1	-	1	1	1	1		-	-	-	-	-	1	-	-	-	1	-	1	1	-	-	1	-	-	1	1	-	-	-	1	1	:
Soil Texture	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo														
Soil Color	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/4)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	StrBrn (7.5 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/4)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/4)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/4)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/4)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/4)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)
Depth (cm)	15-38	0-12	12-29	0-12	12-26	0-17	17-37	0-20	20-31	0-17	17-30	0-13	13-34	0-16	16-38	0-15	15-35	0-17	17-33	0-18	18-40	0-17	17-31	0-20	20-29	0-12	12-30	0-21	21-30	0-13	13-30	0-18	18-33
# dls		18		19		20		21		22		23		24		25		26		27		28		29		30		31		32		33	

Date	04/12/2015		04/12/2015		04/12/2015		04/12/2015		04/12/2015		04/12/2015		04/12/2015		04/12/2015		04/12/2015		04/12/2015		04/12/2015		04/12/2015		04/12/2015		04/12/2015		04/12/2015		04/12/2015		04/12/2015
Excavator(s)	NAW		RAK		NAW																												
Artifact Summary	-	1	-	1	-	1		-	-	1	1	-		-		-	1	-	1	-	-	-		-	-	1	1	-	-	-	-	-	1
Soil Texture	SaLo	SaLo	SaLo																														
Soil Color	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/4)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/4)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/4)	DkBrn (10 YR 3/3)
Depth (cm)	0-20	20-32	0-21	21-29	0-12	12-25	0-17	17-24	0-10	10-22	0-16	16-30	0-10	10-30	0-11	11-21	0-15	15-32	0-22	22-34	0-13	13-24	0-13	13-24	0-15	15-30	0-15	15-29	0-15	15-32	0-15	15-33	0-10
STP#	34		35		36		37		38		39		40		41		42		43		4		45		46		47		48		49		50

Date		04/12/2015		04/12/2015		04/13/2015		04/13/2015		04/13/2015		04/13/2015		04/13/2015		04/13/2015		04/13/2015		04/13/2015		04/13/2015		04/13/2015		04/13/2015		04/13/2015		04/13/2015		04/13/2015	
Excavator(s)		RAK		NAW/RAK		NAW/RAK		NAW		RAK		NAW																					
Artifact Summary	-	-	-	-	-	-		-		-	-	-	1	-	-	-	-	-	-			-	-	-	1	1	-		1	1	1	1	+
Soil Texture	SaLo	SaLo	SaLo																														
Soil Color	DkYBrn (10 YR 4/4)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/4)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/4)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/4)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/4)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)
Depth (cm)	10-35	6-0	9-18	0-10	10-30	0-13	13-23	0-20	20-34	0-13	13-30	0-15	15-25	0-14	14-26	0-16	16-32	0-22	22-40	0-13	13-29	0-12	12-26	0-18	18-32	0-20	20-31	0-14	14-30	0-15	15-30	6-0	9-20
STP#		51		52		53		54		55		56		57		58		59		09		61		62		63		49		65		99	

Date	04/13/2015		04/13/2015		04/13/2015		04/13/2015		04/13/2015		04/13/2015		04/13/2015		04/13/2015		04/13/2015		04/13/2015		04/13/2015		04/13/2015		04/13/2015		04/13/2015		04/13/2015		04/13/2015		04/13/2015
Excavator(s)	RAK		NAW		RAK		NAW		RAK		NAW		RAK		NAW		RAK		NAW		RAK		NAW/RAK		NAW/RAK		NAW		RAK		NAW		RAK
Artifact Summary	!	-	1	-	-	1	-	1	-	1	-	-	-	1	-	-	!	1	-	!	!	1	-	-	-	1	1	1	-	-	-	-	;
Soil Texture	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo
Soil Color	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/4)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBm (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/4)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)
Depth (cm)	0-10	10-20	6-0	9-31	0-20	20-33	0-12	12-24	0-13	13-26	0-15	15-31	0-16	16-33	0-23	23-34	0-19	19-27	0-10	10-22	0-13	13-30	0-18	18-35	0-16	16-39	0-13	13-20	0-14	14-28	0-20	20-36	0-15
STP#	29		89		69		70		71		72		73		74		75		92		77		78		79		80		81		82		83

Date		04/13/2015		04/13/2015		04/13/2015		04/13/2015		04/13/2015		04/13/2015		04/13/2015		04/13/2015		04/13/2015		04/13/2015		04/13/2015		04/13/2015		04/13/2015		04/13/2015		04/13/2015		04/13/2015	
Excavator(s)		NAW		RAK		NAW		RAK		NAW		RAK		NAW		RAK		NAW		RAK		NAW		RAK		NAW		RAK		NAW		RAK	
Artifact Summary	1	1	-	1	-	-		-	-		-	-		-		-	-	1	1	-		-	1	1	-	1	-	-		1	1	1	1
Soil Texture	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo										
Soil Color	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/4)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	Brn (7.5 YR 4/4)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	Brn (7.5 YR 4/4)	DkBrn (10 YR 3/3)	Brn (7.5 YR 4/4)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	Brn (10 YR 4/3)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)
Depth (cm)	15-30	0-15	15-31	0-18	18-32	0-19	19-31	0-16	16-33	0-15	15-34	0-17	17-27	0-16	16-24	0-12	12-28	0-14	14-24	0-24	24-36	0-10	10-30	0-15	15-29	0-12	12-26	0-10	10-32	0-18	18-33	0-14	14-36
STP#		84		85		98		87		88		68		06		91		92		93		94		95		96		26		86		66	

Date	04/13/2015		04/13/2015		04/13/2015		04/13/2015		04/13/2015		04/14/2015		04/14/2015		04/14/2015		04/14/2015		04/14/2015		04/14/2015		04/14/2015		04/14/2015		04/14/2015		04/14/2015		04/14/2015		04/14/2015
Excavator(s)	NAW		RAK		NAW		RAK		NAW/RAK		NAW/RAK		NAW		RAK		NAW		RAK		NAW		RAK		NAW		RAK		NAW		RAK		NAW
Artifact Summary		-	!	-	!		-			-		-				-		-								-	!					-	:
Soil Texture	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo
Soil Color	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	StrBrn (7.5 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/4)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/4)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	Brn (7.5 YR 4/4)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/4)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/4)	DkBrn (10 YR 3/3)
Depth (cm)	0-11	11-22	0-19	19-30	0-19	19-33	0-15	15-26	0-18	18-37	0-12	12-27	8-0	8-24	0-16	16-30	6-0	9-18	0-11	11-30	0-12	12-23	0-13	13-29	0-12	12-27	0-10	10-21	0-19	19-36	0-14	14-30	0-15
STP#	100		101		102		103		104		105		106		107		108		109		110		111		112		113		114		115		116

Date		04/14/2015		04/14/2015		04/14/2015		04/14/2015		04/14/2015		04/14/2015		04/14/2015		04/14/2015		04/14/2015		04/14/2015		04/14/2015		04/14/2015		04/14/2015		04/14/2015		04/14/2015		04/14/2015	
Excavator(s)		RAK		NAW		RAK		NAW		RAK		NAW		RAK		NAW		RAK		NAW		RAK		NAW		RAK		NAW/RAK		NAW/RAK		NAW	
Artifact Summary	-	-	1	-	-	-	1	-	1	-	-	-	-	1	1	-	1	-	1	1	-	1	-	-	1	-	1	1	-	-	-	-	!
Soil Texture	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo
Soil Color	DkYBrn (10 YR 4/4)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/4)	DkBrn (10 YR 3/3)	Brn (10 YR 4/3)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/4)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/4)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/4)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/4)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)
Depth (cm)	15-29	0-18	18-27	0-22	22-39	0-16	16-22	0-12	12-22	0-14	14-30	0-19	19-32	0-20	20-34	0-17	17-33	0-16	16-27	0-18	18-33	0-14	14-30	0-22	22-40	0-25	25-41	0-17	17-26	0-16	16-31	0-13	13-29
# dls		117		118		119		120		121		122		123		124		125		126		127		128		129		130		131		132	

Date	04/14/2015		04/14/2015		04/14/2015		04/14/2015		04/14/2015		04/14/2015		04/14/2015		04/14/2015		04/14/2015		04/14/2015		04/14/2015		04/14/2015		04/14/2015		04/14/2015		04/14/2015		04/14/2015		04/14/2015
Excavator(s)	RAK		NAW		RAK																												
Artifact Summary	-	-	1	-	-	-				1	-	-	-			-	-		-	-			-	-	-	-	-			-	-	1	:
Soil Texture	SaLo	SaLo	SaLo																														
Soil Color	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/4)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/4)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/4)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/4)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/4)	DkBrn (10 YR 3/3)
Depth (cm)	0-12	12-28	0-14	14-24	0-12	12-23	0-17	17-30	0-15	15-33	0-14	14-34	0-17	17-39	0-15	15-38	0-18	18-30	0-17	17-39	0-16	16-27	0-20	20-32	0-26	26-37	0-19	19-30	0-15	15-31	0-19	19-37	0-14
STP#	133		134		135		136		137		138		139		140		141		142		143		144		145		146		147		148		149

Date		04/14/2015		04/14/2015		04/14/2015		04/14/2015		04/15/2015		04/15/2015		04/15/2015		04/15/2015		04/15/2015		04/15/2015		04/15/2015		04/15/2015		04/15/2015		04/15/2015		04/15/2015		04/15/2015	
Excavator(s)		NAW		RAK		NAW		RAK		NAW																							
Artifact Summary	-	-				!				-	-		-			!				-					1	-		-	-	1	-	-	;
Soil Texture	SaLo	SaLo	SaLo																														
Soil Color	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/4)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/4)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)
Depth (cm)	14-28	0-18	18-30	0-10	10-29	6-0	9-31	0-14	14-32	0-17	17-26	0-13	13-33	0-13	13-30	0-10	10-37	0-13	13-28	0-18	18-34	0-15	15-31	0-18	18-29	0-20	20-35	0-14	14-29	0-12	12-38	0-17	17-23
# dls		150		151		152		153		154		155		156		157		158		159		160		161		162		163		164		165	

	04/15/2015		04/15/2015		04/15/2015				
Excavator(s)	NAW		NAW		NAW			Sa-Sandy	
Artifact Summary			!!		!!			Lo-Loam	
Soil Texture	SaLo	SaLo	SaLo	SaLo	SaLo	SaLo		Dk-Dark	Y-Yellowish
Soil Color	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)	DkBrn (10 YR 3/3)	DkYBrn (10 YR 4/6)		Brn-Brown	Str-Strong
Depth (cm)	0-15	15-31	0-17	17-33	0-10	10-30	KEY		
STP#	166		167		168				